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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,507	06/06/2001	John B. Condon	BLD920000065US1	9324
7590	09/13/2005		EXAMINER	
David W. Lynch Crawford Maunu PLLC 1270 Northland Drive, Suite 390 Mendota Heights, MN 55120			LEE, TOMMY D	
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/876,507

Applicant(s)

CONDON ET AL.

Examiner

Thomas D. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005 and 23 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-8,10-13,15-23,25,26,28 and 30-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,4,6-8,10-12,23,25,26,28 and 30-32 is/are allowed.
- 6) ☒ Claim(s) 13,15,16 and 20-22 is/are rejected.
- 7) ☒ Claim(s) 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office action is responsive to applicant's amendment filed June 23, 2005.

Claims 1, 3, 4, 6-8, 10-13, 15-23, 25, 26, 28 and 30-32 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 depends from claim 14, which has been canceled. This claim should be amended to depend from claim 13.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,774,146 (Mizutani) in view of either U.S. Patent 5,072,238 (Takamiya et al.) or U.S. Patent 6,606,945 (Shimatsu et al.).

Regarding claims 13 and 20, Mizutani discloses a print device, comprising: a marker system for rendering a page layout on a medium (print portion G (column 3, lines 33-37)); and a smoothness processing system, coupled to the marker system, the smoothness processing system ascertaining information regarding the smoothness of

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media and controlling the marker system in response to the ascertained information about the media smoothness (print paper discrimination portion D (column 3, lines 28-30)). The smoothness processing system receives the smoothness of the media that is associated with and stored with a print job (discrimination sensor may be designed to measure surface roughness of print paper (column 8, lines 22-24); ROM 8 may be stored with various parameters of the various kinds of papers (column 8, lines 27-32)).

Mizutani does not disclose a user input interface for manually entering a media smoothness indicator. However, such a feature is well known in the art, as manual entry of a media smoothness is disclosed in both Takamiya et al. (recording conditions set in accordance with degree of smoothness of recording paper by operation panel (column 6, lines 23-31)) and Shimatsu et al. (operator inputs paper conditions, including paper surface smoothness (column 20, lines 7-10)). Applicant admits that "[t]hose skilled in the art will recognize that the automation of measuring smoothness of the media does not have to be implemented for the basic idea of utilizing the media roughness information to generate better output such as by selecting the screening algorithm to work best with a given media roughness." (applicant's specification, at page 14, lines 20-23) Therefore, it would have been obvious for one of ordinary skill in the art to modify the teaching of Mizutani by providing manual entry of media smoothness, as disclosed in both Takamiya et al. and Shimatsu et al.

6. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizutani in view of either Takamiya et al. or Shimatsu et al., as applied to claim 13 above, and further in view of U.S. Patent 4,876,606 (Banno et al.).

Regarding claim 21, Mizutani in view of Takamiya et al. or Shimatsu et al. does not disclose communicating to a host when media having a smoothness required according to the information is not available in the print device. Banno et al. disclose an image forming system, wherein a printer communicates status information, including quantity of print media, to a host system (column 4, lines 12-28; column 5, lines 26-43). Providing a means for communicating such information with a host enables an operator and serviceman to foresee problems which may occur in the printer before they actually occur, and thus the printer can be maintained in an optimum operating state (column 5, lines 32-43). Therefore, it would have been obvious for one of ordinary skill in the art to modify the combined teaching of Mizutani and either Takamiya et al. or Shimatsu et al. by providing a means for communicating status information, such as quantity of print media, with a host system, such as disclosed in Banno et al. Whether or not the communication is through bi-directional print stream is a matter of design choice, so long as the status information is communicated from the printer to the host.

Regarding claim 22, an embodiment disclosed in Banno et al. provides for a fault display, which may be communicated to host system when there is a shortage of paper in a printer (column 6, lines 58-68).

Allowable Subject Matter

7. Claims 1, 3, 4, 6-8, 10-12, 23, 25, 26, 28 and 30-32 are allowed.
8. Claims 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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9. Claims 15 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: No prior art has been found to disclose or suggest the use of a halftone screen related to information about media smoothness, as recited in base claims 1 and 23, and as similarly recited in dependent claims 15, 17 and 19.

Response to Arguments

11. Applicant's arguments, see page 7 of applicant's amendment, filed March 17, 2005, with respect to the rejection(s) of claim(s) 13, 14 and 20-22 under 35 U.S.C. §§ 102(b) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of either Takamiya et al. or Shimatsu et al., as set forth above.

Conclusion

12. In view of new grounds for rejection not necessitated by applicant's amendment, this Office action is non-final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas D. Lee whose telephone number is (571) 272-7436. The examiner can normally be reached on Monday-Friday (7:30-5:00), alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas D. Lee
Primary Examiner
Art Unit 2624

tdl
September 6, 2005